The Director of Central Intelligence

Washington, D.C. 20505

MEMORANDUM FOR: The Honorable Daniel K. Inouye
                    Chairman, Senate Select Committee
                        on Intelligence

SUBJECT: Transmittal of Requested Report on Non-Military
                    Uses of Intelligence Assets

     1.   The Senate Select Committee on Intelligence, on page 35 of its classified Report on the FY 1978 NFIP Budget, requested a brief report outlining the non-military uses to which intelligence resources have been put and describing areas and plans for potential contributions in the future.

     2.   The attached report, "Non-Military Uses of Intelligence Assets," has been prepared to meet this request. As the report indicates, intelligence resources have been used in a wide range of activities--including both civil agency activities with reference to domestic areas and foreign intelligence agency uses for economic, commercial, and political purposes.

     3.   I intend to ensure that such applications of intelligence assets continue to the maximum extent wherever security, cost, and statutory considerations permit.

SIGNED

NASA Review Completed.

STANSFIELD TURNER

CRC, 11/18/2003

Attachment:
Report on Non-Military Uses of Intelligence Assets

On file USDA, DOC, AND DOI release instructions apply.

NSA, ARMY and NRO review(s) completed.

25X1

Copy # 5

25X1

25X1

25X1

DCI/IC/OPEI/ID   /rmg (31 October 1977)   25X1

Distribution: All with Attachment   25X1

         Cy 1 -   Addressee
         Cy 2 -   DCI
         Cy 3 -   Acting D/DCI/IC
         Cy 4 -   OLC
         Cy 5 -   D/OPEI
         Cy 6 -   D/OPBD
         Cy 7 -   Executive Secretary/NFIB
25X1   Cy 8 -   NRO
         Cy 9 -   NPIC
25X1   Cy 10 -   CIA/OER
         Cy 11 -   D/OGCR/CIA
         Cy 12 -   CIA/OGCE/GD   25X1
         Cy 13 -   Chairman, Civil Applications Committee
         Cy 14 -   Executive Registry
         Cy 15 -   IC Registry
         Cy 16 -   ID Subject File
         Cy 17 -   ID Chrono
25X1   Cy 18 -

25X1

TOP SECRET

25X1

NON-MILITARY USES OF INTELLIGENCE ASSETS

25X1

25X1

TABLE OF CONTENTS

NON-MILITARY USES OF INTELLIGENCE ASSETS

25X1

25X1

25X1

NON-MILITARY USES OF INTELLIGENCE ASSETS

INTRODUCTION

1.   This report is prepared in response to one of the actions requested in the Senate Select Committee on Intelligence Classified Report on FY 1978 NFIP Budget. Its purpose is to briefly outline the non-military uses to which intelligence resources have been put, and to indicate the potential and plans for future uses.

2.   The report focuses on the exploitation of overhead imagery since all of the examples cited in the Committee request involve this specific source, and since its use represents some of the broader non-military applications of intelligence assets. Historical data have been included for perspective. The report also includes a generalized treatment of non-military uses of other intelligence assets. The use of intelligence assets for foreign policy support, which of course occurs on a continuous basis, will not be included except to illustrate some unconventional applications. The following examples indicate that many intelligence community assets have been made available for non-military uses, either actively or passively (e.g., technology seeping out into the public domain through the contracting mechanism). Possibly more could be done--provided however, that the attendant costs are not at the expense of the intelligence community's capabilities to fulfill its primary mission of collecting intelligence on foreign areas. Decisions on making any specific asset available for such uses would necessarily have to consider factors such as processing and dissemination costs, the need for protecting the capabilities of sensitive intelligence sources and methods, and the need to avoid generating foreign relations problems--for example, by releasing into the public domain foreign area information which other countries consider as too sensitive economic information, and which is therefore available only from classified intelligence sources.

25X1

25X1

25X1

IMAGERY-DERIVED DATA

Mapping Applications on Foreign Areas

3. The global mapping program has been by far the most extensive and systematic use of classified satellite imagery outside the realm of "traditional military intelligence." The program serves the dual objectives of providing reliable map products for actual or contingency military operations and also of improving the accuracy of navigation charts and other general purpose maps that are used daily for commercial and other peaceful activities.

4. When photographic satellites first began collecting foreign intelligence in August 1960 it appeared that the information collected by these satellite systems could not only definitively determine Communist military capabilities for taking hostile actions against the US or its allies, but it could also be used for improving and expediting foreign area mapping programs that directly support Department of Defense military operations. Therefore, the first satellite imagery to be acquired of Soviet territory was made available to DoD mappers for evaluation.

25X1

5. To maximize production effectiveness on these poorly mapped, sometimes completely unexplored, areas, the intelligence maps were designed to satisfy as many purposes as possible--military, industrial, and economic. Thus, not only did they indicate military installations in considerable detail and in their correct locations, but they also showed the pattern of natural and the other man-made features of the Soviet environment.

The maps constituted a graphic summary of the USSR landscape, for the program production specifications required detailed representation of the rivers and streams, mountains, all cities, towns, and villages, factories, power stations, and other major industrial facilities, dams, mines, the rail and road transportation networks, the alignment and capacity of pipelines and powerlines, and major aspects of land use such as agricultural crop land, orchards, irrigated areas, forests, as well as the non-usable areas such as swamps, deserts, and tundras. Political-administrative boundaries were also indicated because of their value for geographic reference purposes.

25X1

7.   DoD mappers used the experience   25X1

25X1

to extend their satellite imagery exploitation programs to standard navigation charts, topographic maps, and urban plans, and as a result literally revolutionized their worldwide mapping, charting, and geodetic production programs. In a recent briefing, the Director of Defense Mapping Agency indicated that about 95 percent of his organization's map production is now based on satellite photography. Many of these products are sufficiently generalized or sanitized to be issued at classifications below SECRET--even down to Unclassified.

Mapping Applications on Domestic Areas

8.   Civil agencies' use of classified satellite imagery to augment conventional aircraft photography for important national programs has a history of over a decade, with the current momentum in the direction of considerably greater exploitation.

4

25X1

25X1

9.   In 1965, the Bureau of the Budget, noting the impact of
classified satellite photography on our mapping of inaccessible foreign
areas, requested the DoD to study the potential of this photography
for similarly improving and expediting US civil mapping. The results of the
DoD mapping study made it clear that classified satellite imagery had a
potential for meeting the mapping and related needs of civilian agencies.
One of the recommendations of the study proposed that the Geological
Survey, Department of the Interior, establish a classified facility where
this imagery could be used by civilian agencies. The Department
of the Interior received Congressional approval to proceed with the
establishment of the facility in February 1967. It was opened at the end
of 1968 in Reston, Virginia, and became the national depository for
classified imagery of the United States.

10.   During this period, Project ARGO was initiated under the
direction of the Presidential Science Adviser to evaluate the information
content of satellite photography as it would apply to various physical
resource surveys and to determine whether it could be used to meet
some current needs of the civilian agencies. An ARGO Steering
Committee that was chaired by the Presidential Science Adviser had, as
one of its functions, the responsibility for collecting and consolidating
civilian agency requirements, transmitting the consolidated requirements
to the Intelligence Community, and discussing the procedures for handling
classified imagery. This Committee continued to perform these functions
following the publication of the ARGO Report in 1968. The report
identified many uses in addition to mapping that could be accomplished
with the imagery. Examples of these were geologic, land use, environ-
mental, insect, disease, and transportation studies.

11.   In July 1973 the OMB-sponsored Federal Mapping Task Force
completed an intensive study of domestic mapping and charting activities
and recommended use of classified satellite imagery by more civil agencies
to increase efficiency and productivity in the face of growing require-
ments for mapping and related products. It pointed out that the acquisition
of a national [   ] photographic data base, with appropriate
periodic updating, offered "a way for national /mapping, charting, and
geodetic/ programs to achieve responsiveness and greater effectiveness"
to support important national programs. The Task Force also concluded
that the capabilities of the NASA ERTS (LANDSAT) imagery system were
inadequate for most of these programs.

5

25X1   25X1

12.   In September 1974 officials from the Departments of
Agriculture, Army (Civil Works), Commerce, and Interior submitted
a joint statement of their increased needs for classified satellite imagery
to implement the Federal Mapping Task Force's recommendations.
The requirements statement was submitted directly to the DCI's repre-
sentative responsible for photographic collection since the abolition of
the position of Presidential Science Adviser also resulted in the demise
of the ARGO Steering Committee.

13.   The four-agency requirements statement was developed as
the result of the various departments conducting pilot studies in the
Reston facility that indicated a promising potential. Their statement
indicated the increased demand "for more efficient management of our
resources and the environment" and referred to the "energy shortage,
depletion of natural resources (renewable and non-renewable), deterioration
and pollution of the environment," and the status of the national
economy as examples of problems that required major program changes
in many agencies. The excellent potential of classified satellite imagery
as a timely and efficient environmental data source and natural resource
management tool was cited to support the continued use of classified
satellite imagery systems as a national asset for these problems.
However, the agencies pointed out that

> "The involvement of civil agencies in the exploitation of
> satellite imagery includes extensive dedication of personnel,
> equipment, and physical space. In order to develop realistic
> programs utilizing the satellite technology, it is necessary to
> have a firm commitment...to insure that sufficient source
> materials will be available in the future for the accomplishment
> of these activities."

14.   This requirement was carefully reviewed by the Intelligence
Community because its acceptance would constitute a formal community
commitment to continue a low level of imagery resource allocation. In   25X1
view of the broad national interest and the economic benefit that would
accrue, it was judged feasible to continue allocating
the film resources to domestic purposes without adverse impact

6   25X1

                                                              25X1

                                                              25X1

on the basic satellite mission of collecting foreign intelligence. Before taking final action on this matter, the DCI advised the President's Foreign Intelligence Advisory Board, the National Security Council, and the Office of Management and Budget of the proposed action, and also had the matter reviewed with appropriate members of Congress.

15. The four agencies were notified of this judgment in a memorandum of 22 April 1975, which also stipulated specific DCI guidance with reference to policy areas, namely:

    a. That the Intelligence Community will not be involved in decisions concerning civil user's needs or priorities;

    b. That civil applications are incidental to the foreign intelligence collection effort,

    c. That the decision to support the civil applications is based on economy of effort at the national level within DCI statutory limitations with respect to domestic affairs and his responsibilities for protection of intelligence sources and methods; and

    d. That a direct charge to the civil agencies is not required at the indicated level of effort. However, if that level should increase in the future, it might be necessary for the participating civil agencies to share in the program costs in some proportionate manner. Therefore, the civil agencies were asked to continue to weigh carefully the cost-versus-gain benefits of such photography.

16. These activities were further reviewed by the Rockefeller Commission which reported in June 1975 it could "find no impropriety in permitting civilian use of aerial photography systems. The economy of operating a single aerial photography program dictates the use of these photographs for appropriate civilian purposes." However, the Commission recommended that a civilian agency committee be re-established to oversee civilian uses to avoid any concerns over improper domestic use. President Ford's directive to establish such a civil agency committee was implemented in October 1975 and the first meeting of the Committee for Civil Applications of Classified Overhead Photography of the United States (CAC), chaired by the Department of the Interior, was held in January 1976.

17.   As a result of the regular diversion in recent years of a small percentage of classified satellite film from the foreign intelligence collection program, classified satellite photography--of a quality adequate for detailed mapping purposes--now covers [   ] of the 48 States (with many areas having been covered several times) and [   ] of Alaska.

Current Civil Agency Uses

18.   Current civil agency uses of classified satellite imagery of the US are concentrated on a number of major production programs, as indicated in the following paragraphs. A more complete list of all reported uses is provided in Table 1.

a.   Department of the Interior. The US Geological Survey was the first systematic user of the domestic imagery for the National Mapping Program. With its aid, the Survey significantly expedited the program of updating the 1:250,000 national topographic map series--the largest scale current map that covers the entire country. Subsequent Survey testing indicated that the imagery would also be useful for updating maps of expanding urban areas at scales more than ten times larger and still achieve the necessary national map accuracy standards. Current applications within the Department of Interior include the new 1:100,000 scale national map series and the production of detailed land use maps. The imagery is particularly useful in poorly surveyed areas such as the National Petroleum Reserve and along the oil pipeline in Alaska.

b.   Department of Agriculture. The Forest Service is using satellite imagery in support of the National Forest Management Act of 1976 as a primary source for multi-resource inventories for [   ] of the total US land areas. The Soil Conservation Service currently uses the imagery in assessing the effectiveness of field and farmstead windbreaks against erosion in the Great Plains States, and is developing plans for testing the imagery in compiling the basic soil surveys that it produces on a county basis.

c.   Department of Commerce. The National Ocean Survey is updating aeronautical and nautical charts with the aid of satellite imagery.

8

d.   Department of Army--Civil Works. Army Corps of
Engineers has used the imagery in floodplain planning, flood pre-
diction studies, and water resource projects.

e.   The Environmental Protection Agency. Satellite imagery
is used in research support of the national environmental monitoring
programs of the National Environmental Policy Act, Clean Air Act,
as amended, and the Federal Water Pollution Control Act of 1972.

TABLE 1

CIVIL AGENCY APPLICATIONS OF CLASSIFIED SATELLITE IMAGERY

The currently reported civil agency applications of classified
satellite imagery of domestic areas are as follows:

Department of Interior - US Geological Survey
        National Mapping - The preparation and maintenance
          of multi-purpose maps, cartographic data, land
          use and land cover maps for the United States, its
          Territories and Possessions, and Antarctica.
        Land and Resource Analyses - The preparation of
          Environmental Impact Analyses and Statements
          for areas of proposed energy exploration and
          development, and the application of earth-science
          data to the solution of critical national energy, water
          and land-resource problems.
        Disaster Studies - Studies of natural and man-
          caused disasters such as earthquakes, oil
          spills, volcanic eruptions, and land slides.
        Resource Inventories - Geologic and water resources
          studies, surveys of national resources and studies
          of eco-systems.

Department of Agriculture - Forest Service, Soil Conservation
        Service, and other agencies
        Land cover and land use inventories.
        Generation and revision of USDA Standard
          Display and Map Products.
        Crop Inventories.
        Water Resources Inventories.
        Prime farmlands inventory.

9

25X1

25X1

25X1

25X1

25X1

Soil Erosion Assessment.
Windbreaks Assessments.
Forest Insect and Disease Assessment.
Evaluation of Forestry Practices.
Flood plain delineations.
Synoptic Assessment of Earth Resources.

Department of Commerce
Compilation and updating of nautical and
aeronautical charts.

Projected future uses include:
Tracking of pollutants, such as oil spills, in
furtherance of National Oceanic and Atmospheric
Administration's environmental monitoring mission.
Delineation of flood areas after natural flood
disasters.
Measurement of snow cover for hydrological studies.

Department of the Army - Corps of Engineers (Civil Works)
Flood plain planning.
Flood prediction studies.
Water resource projects.

Environmental Protection Agency
Studies of environmental trends.
Inventories of point and non-point sources of
pollution - for use as baseline data.

Other Non-Military Uses

19.   The uses summarized above probably constitute only
a portion of the full spectrum of non-military uses to which the classified
imagery can be applied by civil agencies, since the detail provided by
the _____ imagery systems provides a data base
whose extent and capability to meet diverse needs is still being explored.
The frequency in Table 1 of such terms as "studies, assessments, evalu-
ations, and inventories" indicates that the civil agencies are advancing
to increasingly sophisticated and more analytical uses of classified
satellite imagery. The actual extent of additional future domestic agency
applications is difficult to forecast since it depends upon a number
of complex inter-related factors such as individual agency programs and
budgets, the rate and frequency of imagery collection, the difficulties

25X1

10

25X1

25X1

25X1

25X1

25X1

the civil agencies have in using classified imagery, the present and future
levels of security classifications over the imagery from which environmental,
agricultural or scientific data are extracted, and the flexibility and
imaginativeness* of the potential users.

20.   Although the following examples taken from recent
Intelligence Community experience with imagery of foreign areas
overlap to a degree with some applications currently being implemented
by the civil agencies, they constitute another indicator of the potential
spectrum of future applications.

25X1

25X1

---

* To cite one example, National Photographic Interpretation Center
   personnel have pointed out the potential value of classified satellite
   imagery for archaeological investigations.

11

25X1

25X1
25X1

c.   Water Resources Assessments. Satellite photography has been used to assess problems and proposed projects related to water resources. Examples of recent studies include analyzing Soviet river reversal schemes for diverting runoff from the Arctic into Soviet Central Asia, determining the extent to which Syria is withholding Euphrates water from Iraq

25X6
25X6

25X1

25X1

25X1

i.   <u>Disaster Assessment</u>.   Satellite imagery has been
found to be very useful in the analysis of natural disasters.
Examples of recent disasters assessed by using satellite photography
include the African drought, the Managua and China earthquakes,
and the Honduras hurricane.

25X1

damage caused by wind and flooding, the
location of affected people, the severity of drought on the land,
and the status of airfields, roads, and railroads are examples
of the types of information that can be obtained to assist reconstruction
efforts.

21.   A more complete list of the specific non-military uses to
which classified satellite imagery has been applied by Intelligence
Community elements to foreign areas since 1972 is included in Table 2.

13

25X1

25X1

25X1

TOP SECRET

TABLE 2

NON-MILITARY USES OF CLASSIFIED SATELLITE IMAGERY:
TITLES OF FOREIGN AREA STUDIES CONDUCTED SINCE 1972

TOP SECRET

25X1

25X1

Water Resource Assessment

25X1

Soviets Work for Cleaner Water in Volga Basin

Kama-Vychegda-Pechora River Reversal Scheme

The High Dam-Ecological Fact and Fiction

Euphrates Water Problem

25X1

Controlling the Yellow River: Peking's Successes and Failures

25X1

25X1

25X1

25X1

Page Denied

<u>Natural Disaster Assessment</u>

     African Drought Assessment

     Hurricane Damage in Honduras

     China: Economic Impact of Recent Earthquakes

<u>Political-Territorial Issues</u>

     The Sino-Soviet Border: The Amur-Ussuri Frontier

Territorial Issues in the Sino-Soviet Dispute

25X6

Security Considerations

22. Since the primary objective of the classified photographic satellite program is the collection of foreign intelligence bearing on the national security, all TALENT-KEYHOLE-derived imagery, including the dissemination of domestic photography, must be rigorously controlled to prevent foreign countries from accurately assessing the capabilities and taking counter-actions to reduce the overall effectiveness of the satellite collection systems over their areas.

23. However, the detailed information concerning the ground features within US territory that can be extracted from the classified imagery is not sensitive and is fully releasable, at an unclassified level-- in accordance with guidelines that have been established to protect classified photographic satellite technology.

24. Unclassified map products[_____] 25X1
25X1 [_____] have been prepared since late 1968 at the Special Mapping Center operated by the US Geological Survey in Reston, Virginia. Congress appropriated funds for the construction of this appropriately secured facility, which includes the national depository for classified imagery of the United States, for research use by all federal civil agencies. At the present time the Department of Commerce is developing a secure working area for its mapping programs in Rockville, Maryland, and the Geological Survey is preparing to also produce maps at its Rolla, Missouri, facility.

18

25X1

25X1

25X1

Ongoing Actions

25.   In October 1976 the Civil Applications Committee provided
information on the availability and potential of classified satellite imagery
to other civilian agencies who have not yet used the imagery, but might
find it of benefit to their programs.   This task was facilitated by the
recent Presidential decision that permits discussion of classified satellite
photography at the SECRET level of security classification, whereas
previously all such discussions had to be held under TALENT-KEYHOLE
security controls.

26.   Civil agencies' uses are expected to be accelerated by the
ongoing Intelligence Community's (COMIREX) development of security
guidelines that would permit public release of selected imagery--in a
suitably sanitized unattributed form--which would not reveal the sensitive
actual capabilities of the photographic satellite system.

25X1

25X1

19

28.   With respect to famines and other "slowly developing" disasters,
in addition to refining methods of crop forecasting, CIA has in recent years
conducted research on long-term climatological trends, and is currently
researching means of anticipating food and/or population crises. As a
sequel to the good results obtained from the analysis of the 1976 China
earthquake, and from the provision of U-2 photographs and photographic
interpretation assistance to the Guatemala Government after the earthquake
of early 1976, the DCI has recently initiated action to have CIA review
the state of intelligence research on natural disasters, the adequacy of
present intelligence support to US disaster relief efforts, and the problems
of releasing classified information on natural disasters to other countries.
He has also indicated his intention of making "every effort to see that any
research of this type--classified or unclassified--gets into the hands of
the appropriate US officials on a timely basis."

DATA DERIVED FROM OTHER INTELLIGENCE SOURCES

29.   A considerable amount of data collected by non-sensitive human
intelligence sources has regularly been made available for users outside
the intelligence community. Economic, political, geographic, and cartographic
data compiled by intelligence specialists--principally from unclassified
publications, but where feasible cross-checked for validity against infor-
mation obtained from classified intelligence sources--are released in the
form of periodicals or ad hoc publications that are available for purchase
by the general public.

30.   These materials include regular issuances on economic indicators,
international oil developments, and foreign political leaders, as well as
ad hoc publications on other specialized subjects as implications of recent
demographic trends in the Soviet Union and the reconciliation of Soviet and
Western foreign trade statistics. The National Basic Intelligence Factbook,
a compilation of basic data on all foreign areas of the world, is issued semi-
annually by CIA, with inputs by the Defense Intelligence Agency and the
Department of State. Among other reference purposes, it provides a means
of keeping pace with the numerous political-territorial changes that have been
taking place around the world. Table 3 lists all the publications that have
been made publicly available since January 1977 through the Document
Expediting (DOCEX) Project of the Library of Congress.

20

25X1

25X1

25X1

TABLE 3

UNCLASSIFIED CIA PUBLICATIONS RELEASED THROUGH DOCEX

Calendar Year 1977

Document Number	Publication Title	Pub Date
CR 76-14815	USSR Council of Ministers	Dec 1976
CR 76-15094	The USSR Leadership: Party and Government	Dec 1976
CR CS 76-012	Chiefs of State and Cabinet Members of Foreign Governments	Dec 1976
CR 76-14711	Director of Soviet Officials Vol. II: RSFSR	Dec 1976
ER 76-10708	The Cuban Economy: A Statistical Review, 1968-76	Dec 1976
ER 77-10011	Soviet Tin Industry: Recent Developments and Prospects Through 1980	Jan 1977
SR 77-10001U	A Dollar Cost Comparison of Soviet and US Defense Activities, 1966-76	Jan 1977
ER EI 77-001 ER EI 77-002 ER EI 77-003 ER EI 77-004	Economic Indicators (Published Weekly)	Jan 1977
ER IOD SS 77-001 ER IOD SS 77-002	International Oil Developments--Statistical Survey (Published Bi-weekly)	Jan 1977
ER 76-10577U	USSR: The Impact of Recent Climate Change on Grain Production	Oct 1976
CR 77-10004	Council of Ministers of the Socialist Republic of Viet Nam	Jan 1977
ER 77-10012	USSR: Some Implications of Demographic Trends for Economic Policies	Jan 1977
CR CS 77-001	Chiefs of State and Cabinet Members of Foreign Governments	Jan 1977

25X1

25X1

25X1

Document Number	Publication Title	Pub Date
CR 77-10225	Communist Party of the Soviet Union (CPSU) Politburo and Secretariat: Positions and Responsibilities (Wall Chart)	Jan 1977
ER 77-10062	Natural Gas	Feb 1977
ER EI 77-005 ER EI 77-006 ER EI 77-007 ER EI 77-008	Economic Indicators (Published Weekly)	Feb 1977
ER IOD SS 77-003 ER IOD SS 77-004	International Oil Developments Statistical Survey (Published Bi-weekly)	Feb 1977
ER 77-10035 U	USSR: Hard Currency Trade and Payments, 1977-78	Mar 1977
CR 77-10002	Government of the German Democratic Republic (Wall Chart)	Feb 1977
CR 77-10229	Socialist Republic of Vietnam Party and Government Structure (Wall Chart)	Mar 1977
CR 77-10787	Lao People's Democratic Republic Party and Government Structure (Wall Chart)	Mar 1977
CR CS 77-002	Chiefs of State and Cabinet Members of Foreign Governments	Feb 1977
PR 76-10073U	Annotated Bibliography on Transnational and International Terrorism	Dec 1976
CR 77-10848	Directory of Officials of the People's Socialist Republic of Albania	Mar 1977
GC BIF 77-001 (U)	National Basic Intelligence Factbook	Jan 1977
CR 77-10017	Communist Party of the Soviet Union (CPSU) Central Committee: Executive and Administrative Apparatus (Wall Chart)	Mar 1977
CR 77-10529	Appearances of Soviet Leaders Jan-Dec 1976	Feb 1977

Document Number	Publication Title	Pub Data
ER EI· 77-009 ER EI 77-010 ER EI 77-011 ER EI 77-012 ER EI 77-013	Economic Indicators (Published Weekly)	Mar 1977
ER IOD SS 77-005 ER IOD SS 77-006	International Oil Developments Statistical Survey (Published Bi-weekly)	Mar 1977
ER 77-10240U	The International Energy Situation: Outlook to 1985	Apr 1977
ER 77-10270	Prospects for Soviet Oil Production	Apr 1977
ER 77-10140	Major Petroleum Refining Centers for Export	Apr 1977
CR 77-11360	Membership, USSR Academy of Sciences	Mar 1977
CR 77-11706	Democratic People's Republic of Korea Party and Government Structure	Apr 1977
ER EI 77-014 ER EI 77-015 ER EI 77-016 ER EI 77-017	Economic Indicators (Published Weekly)	Apr 1977
ER IOD SS 77-007 ER IOD SS 77-008	International Oil Developments Statistical Survey (Published Bi-weekly)	Apr 1977
CR 77-11802	People's Socialist Republic of Albania: Government and Party Structure (Wall Chart)	Apr 1977
CR 77-11900	USSR Ministry of Agriculture (Wall Chart)	Apr 1977
ER 77-10132	Reconciliation of Soviet and Western Foreign Trade Statistics	May 1977
CR 77-11829	Directory of USSR Ministry of Foreign Affairs Officials	Apr 1977
CR CS 77-004	Chiefs of State and Cabinet Members of Foreign Governments	Apr 1977

25X1

Document Number	Publication Title	Pub Date
ER EI 77-018 ER EI 77-019 ER EI 77-020 ER EI 77-021	Economic Indicators (Published Weekly)	May 1977
ER IOD SS 77-009 ER IOD SS 77-010	International Oil Developments Statistical Survey (Published Bi-weekly)	May 1977
CR 77-12060	Directory of USSR Ministry of Defense and Armed Forces Officials	May 1977
CR CS 77-005	Chiefs of State and Cabinet Members of Foreign Governments	May 1977
CR 77-12059	Appearances and Activities of Leading Personalities of the People's Republic of China, 1 January-31 December 1976	May 1977
ER 77-10030U	China Oil Production Prospects	June 1977
ER EI 77-022 ER EI 77-023 ER EI 77-024 ER EI 77-025 ER EI 77-026	Economic Indicators (Published Weekly)	June 1977
ER IOD SS 77-011 ER IOD SS 77-012 ER IOD SS 77-013	International Oil Developments Statistical Survey (Published Bi-weekly)	June 1977
CR CS 77-006	Chiefs of State and Cabinet Members of Foreign Governments	June 1977
CR 77-13114	USSR Ministry of Foreign Trade (Wall Chart)	June 1977
ER 77-10313	Major Oil and Gas Fields of the Free World	June 1977
ER 77-10425	Prospects for Soviet Oil Production, A Supplemental Analysis	July 1977
CR 77-12843	Foreign Affairs Organization of the People's Republic of China (Wall Chart)	June 1977

25X1

25X1
25X1

Document Number	Publication Title	Pub Date
ER EI 77-027 ER EI 77-028 ER EI 77-029 ER EI 77-030	Economic Indicators (Published Weekly)	July 1977
ER IOD SS 77-014 ER IOD SS 77-015	International Oil Developments Statistical Survey (Published Bi-weekly)	July 1977
CR 77-13209	Directory of Officials of the Polish People's Republic	July 1977
CR CS 77-007	Chiefs of State and Cabinet Members of Foreign Governments	July 1977
ER 77-10436U	Soviet Economic Problems and Prospects (also available at GPO as a Joint Economic Committee Report)	July 1977
RP 77-10034U	International Terrorism in 1976	July 1977
CR 77-13037	Foreign Trade Organizations of the People's Republic of China (Wall Chart)	July 1977
CR 77-12966	Democratic Cambodia Government Structure (Wall Chart)	August 1977
ER EI 77-031 ER EI 77-032 ER EI 77-033 ER EI 77-034	Economic Indicators (Published Weekly)	August 1977
ER IOD SS 77-016 ER IOD SS 77-017	International Oil Developments Statistical Survey (Published Bi-weekly)	August 1977
ER 77-10468	Nuclear Energy	August 1977
ER 77-10296	Communist Aid to the Less Developed Countries of the Free World, 1976	August 1977

31.   In addition, copies of unclassified maps and atlases derived from the extensive CIA cartographic and geographic research program have been made available for purchase through the Superintendent of Documents of the Government Printing Office. Recent products include the Indian Ocean Atlas, the USSR Agricultural Atlas, the People's Republic of China Atlas and Administrative Atlas, and the Maps of the World's Nations series of continental atlases, as well as the packets of basic orientation maps on individual countries of the world.

25X1

25X1

ANALYTICAL METHODS AND TECHNOLOGY

35.   Intelligence Community analytical methods and technology generally replicate techniques already prevalent in the non-intelligence world. However, there are instances where the depth of analysis or the need to develop specialized technical assistance to overcome problems specific to intelligence results in capabilities that exceed those already publicly or commercially available.

25X1

37.   Other examples of intelligence-developed analytical methods may exist, e.g., in aspects of economic, political science, or geographic research, but they do not appear to be sufficiently differentiated from methodology currently used in the non-intelligence world to warrant attention.

25X1

TOP SECRET

39.   Personnel from the National Photographic Interpretation Center
are interacting directly with civil and industrial organizations
in exchanging experience
on advanced imagery enhancement techniques using the assistance of
computers. Information on advanced CIA cartographic technology,
including Automap System and associated computer software programs
for plotting cartographic data, has been made available to non-military
users through briefings, presentations at professional meetings, and by
articles in cartographic professional publications. Also the Computer
Automated Mapping program and two World Data Banks have been placed
in the public domain through the National Technical Information Service.
The graphic that the US Geological Survey uses to record imagery
coverage acquired by the NASA LANDSAT satellites was based on the
contribution of CIA cartographic personnel who had been providing
specialized support to classified satellite operations.

40.   It is probable that some intelligence technology also permeates
into the public domain through the contracting mechanism since the
development of specialized intelligence community equipment has fre-
quently been done in conjunction with contractors. The time available
for this project, and the diversity of intelligence activities does not
permit tracking the extent of this influence. However, it seems highly
probable that commercial production of miniature cameras and highly
sensitive miniature audio-surveillance devices has been influenced by
such newly-developed production capabilities in companies that have
done contract work for foreign intelligence organizations.

25X1

25X1

25X1

25X1

Next 1 Page(s) In Document Denied

Page Denied

5 NOV 1977

MEMORANDUM FOR: Director of Central Intelligence

FROM: John N. McMahon
                                   Acting Deputy to the DCI for the
                                      Intelligence Community

SUBJECT: Transmittal of Requested Report to Senate
                                   Select Committee on Intelligence

25X1   1. Action Requested: Your review and approval of the
attached report on "Non-Military Uses of Intelligence Assets" for trans-
mittal to the Senate Select Committee on Intelligence.

25X1   2. Background: The Senate Select Committee on Intelligence
in its classified Report on the FY 1978 NFIP Budget requested a number of
studies on various specific subjects be accomplished and furnished to the
Committee.   One of the requests was for a brief report by October 1977
outlining the non-military uses "to which intelligence resources have been
put and describing areas and plans for potential contributions in the
future."   The attached report on "Non-Military Uses of Intelligence Assets"
has been prepared to satisfy this request.

25X1   3. Staff Position: This report has been prepared from
data either directly supplied by, or coordinated with, pertinent elements
of the intelligence and civilian communities--specifically including
personnel in NPIC, NRO, CIA's Offices of Economic Research, Geographic
and Cartographic Research, and Central Reference, the Intelligence
Community Staff, and the Committee for Civil Applications of Classified
Overhead Photography of the United States.   A preliminary draft was
discussed with the Senate staff personnel who wrote up the Committee
request for the report.   This initial draft was subsequently modified
to respond to their suggestions.

25X1

25X1

Copy 3

SECRET

25X1

4. ☐ <u>Recommendation</u>: Recommend your approval of the attached report for transmittal to the Senate Committee. The attached letter of transmittal is provided for your signature.

25X1

John N. McMahon

Attachments:
  1 - Proposed DCI Letter to Chairman, SSCI
  2 - Report: "Non-Military Uses of Intelligence Assets"

25X1

Page Denied

Next 2 Page(s) In Document Denied